

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method, comprising:
accessing diphone waveforms, derived residuals, and Linear Predictive Coding
(LPC) coefficients;
compressing a set of the diphone waveforms into a set of compressed diphone
residuals diphones;
~~generating a set of linear predictive coding (LPC) coefficients using an encoder,~~
~~wherein the generating of the LPC coefficients is performed while~~
~~compressing the diphone waveforms;~~ storing the set of compressed
~~diphone residuals~~ diphones, the derived residuals, and the set of LPC
coefficients in a compressed packet;
decompressing a requested diphone in response to a request from a waveform
synthesizer; and
providing the requested diphone, corresponding derived residuals, and
corresponding LPC coefficients to the waveform synthesizer
~~receiving a request from a waveform synthesizer residing on a client for a diphone~~
~~residual for a particular speech output;~~
~~locating the requested diphone residual;~~
~~extracting the located diphone residual from the set of diphone residuals; and~~
~~supplying the diphone residual to the waveform synthesizer on the client to~~
~~produce the particular speech output.~~
2. (Currently Amended) The method of claim 1, ~~further comprising: wherein the~~
~~compressing of~~ the set of diphone waveforms into the set of diphone residuals is
performed using an encoder; ~~and~~

~~decompressing the extracted diphone residual using a decoder.~~

3. (Currently Amended) The method of claim 1, further ~~comprises supplying the set of LPC coefficients to the waveform synthesizer~~ comprising:
receiving the request from the waveform synthesizer, the waveform synthesizer
residing at a client;
locating the requested diphone from the compressed packet; and
extracting the requested diphone for decompression, the corresponding derived
residuals, and the corresponding LPC coefficients from the compressed
packet.
4. (Currently Amended) The method of claim 1, further ~~comprise~~ comprising
~~supplying~~ providing pitch marks to the waveform synthesizer.
5. (Currently Amended) The method of claim 1, wherein the waveform synthesizer
to utilize the requested diphone, the corresponding derived residuals, the
corresponding LPC coefficients, and pitch marks to produce the particular a
speech output on the client, ~~the client including a handheld device.~~
6. (Previously Presented) The method of claim 2, wherein the encoder comprises a
G.723 encoder.

Claims 7-11 (Cancelled)

12. (Currently Amended) A system, comprising:
a server comprises a concatenative speech database having ~~compressed diphone~~
waveforms, derived diphone-residuals, and compressed-LPC coefficients,
the server to compress the diphone waveforms into compressed diphones,
store the compressed diphones, the derived residuals, and the LPC
coefficients into a compressed packet, decompressing a requested diphone

in response to a request from a waveform synthesizer, and providing the requested diphone, corresponding derived residuals, and corresponding LPC coefficients to the waveform synthesizer-generated by an encoder
~~while compressing diphone waveforms into the diphone residuals, the server to locate a diphone residual and extract the diphone residual from the compressed diphone residuals in response to a request for the diphone residual from a waveform synthesizer residing on a client to produce a particular speech output; and~~

~~the a client coupled with server, the client having the waveform synthesizer to place the request with the server, receive the requested diphone, the corresponding derived residual-residuals, and the corresponding LPC coefficients, and a decoder to decompress the diphone residual and the LPC coefficients to produce the particular a speech output.~~

13. (Currently Amended) The system of claim 12, wherein the server is further comprises: to compress the diphone waveforms using an encoder, the encoder including a G.723 encoder
~~a text analysis module for processing a text into forms of linguistic representations; and~~
~~a linguistic and prosodic analysis module for analyzing the forms of linguistic representations corresponding to their assigned language system.~~
14. (Currently Amended) The system of claim 12, wherein the ~~concatenative speech database-f server~~ is further comprises to provide pitch marks to the waveform synthesizer at the client.

Claims 15-27 (Cancelled)

28. (Currently Amended) The system of claim 12, 14, wherein the waveform synthesizer at the client is further to receive the pitch marks.

Claims 29-31 (Cancelled)

32. (Previously Presented) The ~~apparatus-system~~ of claim ~~29, 12~~, wherein the client comprises a handheld device including one or more of the following: a telephone, a pocket computer system, and a personal digital assistant (PDA).
33. (New) A machine-readable medium having stored thereon data comprising sets of instructions which, when executed by a machine, cause the machine to:
- access diphone waveforms, derived residuals, and Linear Predictive Coding (LPC) coefficients;
 - compress the diphone waveforms into compressed diphones;
 - store the compressed diphones, the derived residuals, and the LPC coefficients in a compressed packet;
 - decompress a requested diphone in response to a request from a waveform synthesizer; and
 - provide the requested diphone, corresponding derived residuals, and corresponding LPC coefficients to the waveform synthesizer.
34. (New) The machine-readable medium of claim 33, wherein the compressing of the diphone waveforms is performed using an encoder.
35. (New) The method of claim 33, wherein the sets of instructions which, when executed by the machine, further cause the machine to:
- receive the request from the waveform synthesizer, the waveform synthesizer residing at a client;
 - locate the requested diphone from the compressed packet; and

extract the requested diphone for decompression, the corresponding derived residuals, and the corresponding LPC coefficients from the compressed packet.

36. (New) The machine-readable medium of claim 33, wherein the sets of instructions which, when executed by the machine, further cause the machine to provide pitch marks to the waveform synthesizer.
37. (New) The machine-readable medium of claim 33, wherein the waveform synthesizer to utilize the requested diphone, the corresponding derived residuals, the corresponding LPC coefficients, and pitch marks to produce a speech output on the client.